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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/990,804	11/14/2001	Karl Mannemann	WEI0029	3729

832 7590 01/28/2004

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EXAMINER

HALPERN, MARK

ART UNIT

PAPER NUMBER

1731

DATE MAILED: 01/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/990,804

Applicant(s)

MANNEMANN ET AL.

Examiner

Mark Halpern

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 1-4, 12 and 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-11 and 14-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 11/14/01
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1) Applicants' election without traverse of invention II, drawn on claims 5-11, 14-20, in Paper received 10/20/2003, is acknowledged.

Claims 1-4, 12-13, are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Drawings

2) Figures 1 and 2 recite "STAN DER TECHNIK". Non-English language description is not clear. The Specification, page 4, refers to said figures as "the state of the art". It is not clear if Figures 1 and 2 are prior art.

Specification

3) Term "TRANSLATION" should be removed from page 1. Also, non-English language terms, for example, "(Gemengedecke)" on page 4, should be removed.

4) Tables 5-6 on page 10, Table 7 on page 11, Table 8 on page 12, of the Specification are not arranged in an orderly manner. Corrected tables are required.

5) Reference to "(Fig. 3)" should be removed from the last line of the Abstract.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6) Claims 5-11, 14-20, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Regarding claim 6, the phrases "highly transmittive glass types" and "Flint glass types" render the claim indefinite.

Claim 6 recites the limitation "highly transmittive glass types" in lines 1-2, and Claim 6 recites the limitation "Flint glass types" in line 2. Claim 7, recites the limitation "the feeding-in" in line 2. Claim 8 recites the limitation "the melt bath" in line 2. Claim 10 recites the limitation "the stirring" in line 2. Claim 14, recites the limitation "the feeding-in" in line 1. Claims 15, 16, recite the limitation "the melt bath" in lines 1-2. Claim 20 recites the limitation "the stirring" in line 1. There is insufficient antecedent basis for the limitations in the claims.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and

Art Unit: 1731

Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949).

In the present instance, claims 8, 15, 16, recite the broad recitation "1100 ° to 1380 °C", and the claims also recite "1280 ° to 1380 °C" which is the narrower statement of the range/limitation.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7) Claims 5, 7-8, 10, 16, are rejected under 35 U.S.C. 103(a) as being unpatentable over Rough (3,988,138).

Claim 5: Rough discloses a method for melting glass-making materials into homogenized molten glass. In the process glass melting materials are fed into chamber C' of furnace 50 by means of a hopper 55 and screw 56. The furnace chamber is an

Art Unit: 1731

enclosed chamber by means of top wall 54. Electrodes 58-61 provide energy to the molten glass, the electrodes extend into the chamber from the bottom of the chamber and are located below the melt surface. The chamber also includes stirrer 62 mounted on shaft 63 and driven by gear box 70 and motor 71 located above the chamber. When the stirrer is rotated the molten glass surface takes on a configuration as shown in Figure 4 defining a concave surface or vortex. The glass-making materials are introduced into this vortex of the stirrer 62, which causes good stirring of the molten glass and good mixing of the molten glass with the newly introduced materials (col. 4, line 45 to col.5, line 58, and Figures 4, 5). Rough is silent on the use of a well-homogenized mixture of highly pure raw materials, however, it would have been obvious, to one skilled in the art at the time the invention was made, to use a well-homogenized mixture of highly pure raw materials in the Rough process, because doing so would increase the versatility of the Rough process and permit production of glass highly transmissive in the UV range in addition to the glass ordinarily produced.

Claim 7: batch process mode operation is disclosed (col. 3, lines 60-68).

Claims 8, 16: the melt bath temperature of 2000 to 2300 °F, which equates to 1093 to 1260 °C, is disclosed (col. 4, lines 1-10).

Claim 10: the stirring occurs at 50 times per minute (col. 3, lines 57-59).

8) Claims 6, 11, 14-15, 20, are rejected under 35 U.S.C. 103(a) as being unpatentable over Rough in view of Enomoto (5,320,985).

Claims 6, 11: Rough is applied as above for claim 5, Rough fails to disclose highly transmissive glass types as Flint glass types with an Abbe coefficient less or

Art Unit: 1731

equal to 50. Enomoto discloses an optical flint type glass of Abbe number between 57 and 40 (Enomoto, col. 1, lines 5-10). It would have been obvious, to one skilled in the art at the time the invention was made, to combine the teachings of Rough and Enomoto, because the combination would provide for a product of Rough of optical glass of improved light transmissivity and good chemical durability as disclosed by Enomoto (Enomoto, col. 1, lines 25-30, and col. 3, lines 6-11).

Claim 14: batch process mode operation is disclosed (Rough, col. 3, lines 60-68).

Claim 15: the melt bath temperature of 2000 to 2300 °F, which equates to 1093 to 1260 °C, is disclosed (Rough, col. 4, lines 1-10).

Claim 20: the stirring occurs at 50 times per minute (Rough, col. 3, lines 57-59).

Allowable Subject Matter

9) Claims 9, 17-19, would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The primary reason for indicating allowable subject matter is that the cited prior art does not show: a process for production of glasses highly transmissive in the UV range, where in said process the temperature in the space above the melt surface is as claimed (claims 9, 17-19).

Art Unit: 1731

Conclusion

10) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Halpern whose telephone number is 571-272-1190. The examiner can normally be reached on Mon-Fri, (9:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.



Mark Halpern
Patent Examiner
Art Unit 1731